

HERPETOLOGY.—*A new genus of Central American snakes related to TANTILLA.*<sup>1</sup> HOBART M. SMITH.<sup>2</sup> (Communicated by HERBERT FRIEDMANN.)

The peculiar character of the teeth of certain members of the genus *Tantilla* (*brevissima*, *lintoni*) has been observed previously.<sup>3</sup> At the time the observations were made, it was not possible to determine whether the more generalized condition obtaining in these two species was the rule for Central and South American species of the genus, or whether other species might not show as less significant the apparently great difference between the two types of dentition. Representatives of most of the important species groups of the United States and Mexico were then examined, but no members of the several distinctly different groups of Central and South American species.

Since then I have been able to examine maxillae of most other species groups of the genus, including *canula*, *melanocephala*, *moesta*, *vermiformis*, and a species related to *taeniata*, all from Central and South America. A few more Mexican and United States species and subspecies that were not previously examined were also checked.

With the exception of *brevissima* and *lintoni*, the dentition of the maxilla holds to a rather well defined pattern, with relatively little variation. Invariably the teeth are flattened at the tips, and those anterior to the fangs are of subequal length. Two grooved fangs terminate the tooth series. The grooves are very well defined and the fangs sharply differentiated from the other teeth by their much larger size. Usually a small diastema precedes the fangs, but in some species there definitely is no diastema. Also the fangs are usually slightly or distinctly offset from the line of the other teeth, but this is definitely not the case in *canula* and *calamarina*, and in some others the extent of offsetting is negligible. There is no correlation between size of diastema and extent of offsetting of the fangs. The number of teeth, including fangs, varies between 12 and 19. *T. calamarina* has 12 (checked in two specimens); *atriceps*, *bocourti*, *nigriceps*, and a species related to *eiseni* have 13; *wilcoxi*, *fumiceps*, and *vermiformis*, 14; *eiseni*, *gracilis*, *canula*, and *miniata*, 15; *coronata*, *wagneri*, and *moesta*, 16; species related to *taeniata*, 17; and *melanocephala*, 17. Obviously there is no possibility of tracing relationships by number of teeth, for close relatives may differ considerably, and likewise species distantly related may have the same number of teeth. It is easily possible, how-

<sup>1</sup> Received October 31, 1940.

<sup>2</sup> Walter Rathbone Bacon Traveling Scholar, Smithsonian Institution.

<sup>3</sup> Proc. Biol. Soc. Washington 53: 60-61. 1940.

ever, that in case an intensive study were undertaken, the average number of teeth in a series of specimens of a species would show some significance in comparison with the average numbers of other species. Intraspecific variation was noted in *bocourti* (some have 10+2, others 11+2, others 12+2 teeth) and certain other species, and very likely occurs to a comparable extent in all species of the genus.

The two species most closely approaching the condition occurring in *lintoni* and *brevissima* are *calamarina* and *canula*. In these the difference in size between fangs and the other teeth is less than in other species. In *calamarina* the fangs are one and one-half times as long as the other teeth but are larger at the base, broader throughout their length, and appear at least twice the size of the preceding teeth. The grooves are very plain and deep. In *canula* the fangs are twice as long as the other teeth, deeply grooved, but their bases are not greatly larger, and accordingly their size is little more than twice that of the others.

In total number of maxillary teeth, *melanocephala*, the southernmost species of the genus, is the closest to *brevissima* and *lintoni*, but there is no close relationship to them, for the fangs are very large, offset, deeply grooved, and preceded by a diastema.

In *brevissima* and *lintoni* the rear teeth are not offset from the others, and there is no diastema whatever. In *lintoni*, there is absolutely no difference between the rear teeth and the others, either in size or grooving. Furthermore, the teeth do not exhibit the flattened condition (at the tip) obtaining in other species, but are thick throughout their length, with dull points. Finally, the teeth number 23 on one side, 25 on the other—considerably more than in other members of the genus.

*T. brevissima* is essentially similar to *lintoni*, but exhibits certain differences which show close relationship to other species of *Tantilla*. The rear teeth (presumably two, the extreme posterior tooth missing from its socket, but assumed to be similar to the tooth preceding) are visibly enlarged, perhaps one and one-third times as long as the others, their bases slightly larger, but their size apparently less than twice that of the other teeth. Otherwise, the rear teeth are exactly like the remainder, so far as I can see. They are somewhat rounded, with no evidence of grooves. The teeth preceding these are somewhat flattened at the tips, essentially similar to the teeth of other *Tantilla*. Finally, the total maxillary tooth count is 22.

Despite certain differences between the dentition of *brevissima* and *lintoni*, the two species are best associated together, since both have

ungrooved posterior teeth, and a considerably greater number of teeth than any other of the genus. It is possible that *Tantilla brevis* (which I have not seen) has similar dentition, but I think no other can be linked with these.

Because of the differences exhibited by these two species, it appears that they are best segregated from *Tantilla*. They are placed in

**Tantillita** gen. nov.

*Diagnosis*.—Hypapophyses absent in posterior part of vertebral column; scales in 15 rows, smooth, without apical pits; scales of head normal, except temporals 1+1, and no loreal; teeth on maxilla number 22 to 25, about equal in size, posterior teeth not at all or but slightly enlarged, not grooved; head somewhat flattened; size small; tail relatively short.

*Genotype*.—*Tantilla lintoni* Smith, Proc. Biol. Soc. Washington 53: 61–62, fig. 1. 1940. (Piedras Negras, Guatemala).

*Referred species*.—*Tantilla brevissima* Taylor, Trans. Kansas Acad. Sci. 39: 344–345, fig. 4. 1936 (1937) (Tonalá, Chiapas).

HERPETOLOGY.—*Notes on snakes of the genus Conophis*.<sup>1</sup> HOBART M. SMITH. (Communicated by HERBERT FRIEDMANN.)

The identification of a specimen related to *Conophis lineatus* from Chiapas, Mexico, has led to a review of available material of that genus from Central America and Mexico.

While all the members of the genus are pretty closely related, two major divisions are discernible. One contains *vittatus* (with its subspecies *viduus*) and is characterized by (1) the presence normally of seven supralabials and (2) the absence of pigment on the supralabial border, chin, ventrals, and first scale row. The second major division contains *lineatus* and *pulcher* and is characterized by (1) the presence normally of eight supralabials and (2) pigmentation on the supralabial border, chin, ends of ventrals (usually), and on the first scale row.

The subdivisions within the second division are, of course, specific, as there are only two species. One species (*pulcher*, with its subspecies *plagosus*) is characterized by (1) a well-defined color pattern, with 10 stripes at least posteriorly, the median pair on the paravertebral rows; and (2) presence of a dark stripe (actually the edge of the dorso-lateral stripe) on (including) the second scale row on all the body (except neck). The second species (*lineatus*) is characterized by (1) less well defined stripes, some or all tending to become obsolete; no stripes or indication of stripes on the paravertebral rows on any part of the body; pattern essentially of six stripes; and (2) the second scale

<sup>1</sup> This study was completed and part of the material utilized was collected during tenure of a Walter Rathbone Bacon Traveling Scholarship of the Smithsonian Institution. Received November 13, 1940.